



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/726,102

12/02/2003

Ciprian Agapi

BOC9-2003-0074 (445)

4811

23628 7590 07/06/2009
WOLF GREENFIELD & SACKS, P.C.
600 ATLANTIC AVENUE
BOSTON, MA 02210-2206

EXAMINER

COLUCCI, MICHAEL C

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

07/06/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/726,102	Applicant(s) AGAPI ET AL.	
	Examiner MICHAEL C. COLUCCI	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicants arguments with respect to claims 24 and 25 have been considered but are moot in view of the new grounds of rejection. Examiner has withdrawn Washio and has incorporated Marx et al. US 6173266 B1 (hereinafter Marx), Wherein Marx explicitly teaches a user interface for the representation of a call flow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehsani et al. US 20020032564 A1 (hereinafter Ehsani) in view of Marx et al. US 6173266 B1 (hereinafter Marx).

Re claims 24 and 25, Ehsani teaches a method for generating a speech recognition application call flow from a call flow representation of the speech recognition application call flow specified by a designer using a user interface configured to allow the designer to create the call flow representation ([0221]), the method comprising:

adding a representation of a first prompt to the call flow representation in response to at least one designer instruction, received via the user interface, to add the first prompt, the first prompt being defined to solicit a response from a user of the speech recognition application call flow ([0213]);

adding a representation of at least one grammar, selected by the designer from a list of existing grammars, to the call flow representation in response to at least one designer instruction, received via the user interface ([0224]), to add the at least one grammar in association with the first prompt, the at least one grammar defining valid responses to the first prompt ([0233]);

adding a representation of a response option to the call flow representation in response to at least one designer instruction, received via the user interface, to add the response option in association with the first prompt, the response option defining a valid response to the first prompt ([0215], consecutive multiple prompts dependent on preceding prompts, “his/her name, address, credit card number, and upon successful completion of these items ask the user to say the title of the book he/she is looking for”);

adding a representation of a second prompt to the call flow representation in response to at least one designer instruction, received via the user interface, to add the second prompt, the second prompt to be provided to the user should the user respond to the first prompt with one of the valid responses defined in the at least one grammar ([0215], consecutive multiple prompts dependent on preceding prompts, “his/her name, address, credit card number, and upon successful completion of these items ask the user to say the title of the book he/she is looking for”);

adding a representation of a third prompt to the call flow representation in response to at least one designer instruction, received via the user interface, to add the third prompt, the third prompt to be provided to the user should the user respond to the first prompt with the response option ([0215], consecutive multiple prompts dependent on preceding prompts, "his/her name, address, credit card number, and upon successful completion of these items ask the user to say the title of the book he/she is looking for")

automatically generating the speech recognition application call flow from the call flow representation such that if the response option is defined as a valid response in the at least one grammar ([0215], consecutive multiple prompts dependent on preceding prompts, "his/her name, address, credit card number, and upon successful completion of these items ask the user to say the title of the book he/she is looking for"), the third prompt is presented to the user instead of the second prompt when the user responds to the first prompt with the response option

However, Ehsani fails to teach adding a representation of a second prompt to the call flow representation

adding a representation of a third prompt to the call flow representation

the third prompt is presented to the user instead of the second prompt when the user responds to the first prompt with the response option

Marx teaches a user interface for the design and implementation of a call flow (Fig. 7) having a set of parameters and recognized vocabularies (Fig. 8), wherein Marx teaches well known uses of call flow designs having multiple prompts, where Marx

Art Unit: 2626

teaches an application that outputs an audible speech signal to the caller by, for example, playing a prerecorded prompt or using a speech generator such as text-to-speech converter: "If you know the name of the person you wish to speak to, please say the first name followed by the last name now. If you would like to speak to an operator, please say `Operator` now." The application then waits for a response from the caller (130) and processes the response when received (140). If the caller says, for example, "Mike Smith," the application must be able to recognize what the caller said and determine whether there is a Mike Smith to whom it can transfer the call. Robust systems should recognize common variations and permutations of names. For example, the application of FIG. 1 may identify members of a list of employees of Company A by their full names--for example, "Michael Smith." However, the application should also recognize that a caller asking for "Mike Smith" (assuming there is only one employee listed that could match that name) should also be connected to the employee listed as "Michael Smith." Assuming the application finds such a person, the application outputs a confirming prompt: "Do you mean `Michael Smith`?" (150). The application once again waits to receive a response from the caller (160) and when received (170), takes appropriate action (180). In this example, if the caller responded "Yes," the application might say "Thank you. Please hold while I transfer your call to Michael Smith," before taking the appropriate steps to transfer the call. FIG. 2 shows some of the steps that are performed for each interactive step of the interactive application of FIG. 1. Specifically, applying the process of FIG. 2 to the first interaction of the application described in FIG. 1, the interactive speech application outputs the prompt of step 120 of

Art Unit: 2626

FIG. 1 (210). The application then waits for the caller's response (220, 130). This step should be implemented not only to process a received response, as shown in the example of FIG. 1 (140), but also to handle a lack of response. For example, if no response is received within a predetermined time, the application can be implemented to "time out" (230) and reprompt the caller (step 215) with an appropriate prompt such as "I'm sorry, I didn't hear your response. Please repeat your answer now," and return to waiting for the caller's response (220, 130) (Marx Col. 1 lines 30-67).

Further, Marx improves these well known limitations by teaching call flow design using a call flow interface whereby valid user responses based on a vocabulary database and yes/no module are defined (Marx Col. 18 lines 47-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Ehsani to incorporate adding a representation of a second prompt to the call flow representation, adding a representation of a third prompt to the call flow representation, and the third prompt is presented to the user instead of the second prompt when the user responds to the first prompt with the response option as taught by Marx to allow for the design of a call flow with a yes/no option and a plurality of responses (Marx Col. 1 lines 30-67), wherein each response can be designed within the call flow to produce a plurality of different valid actions/prompts (Marx Col. 18 lines 47-56) which through templates are "optimized to provide the highest possible recognition accuracy and task completion rates" (Marx Col. 4 lines 20-33).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6714905 B1, US 5617578 A, US 5940797 A, US 5812977 A, US 6064961 A, US 5903867 A, US 4864501 A, US 5970460 A, US 5704060 A, US 20030195739 A1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Colucci whose telephone number is (571)-270-1847. The examiner can normally be reached on 9:30 am - 6:00 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael C Colucci/
Examiner, Art Unit 2626
Patent Examiner
AU 2626
(571)-270-1847
Michael.Colucci@uspto.gov

/Richemond Dorvil/
Supervisory Patent Examiner, Art Unit 2626